IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 2454
	)	
Larry White et al.	)	Examiner: Park, Jeong S.
	)	
Application No.: 10/658,439	)	
	)	**APPEAL BRIEF**
Filed: September 8, 2003	)	
	)	
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Sir:

In furtherance of the Applicants' Notice of Appeal filed on February 26, 2010, this Appeal Brief is submitted. This Appeal Brief is submitted in support of the Applicants' Notice of Appeal, and further pursuant to the rejection mailed on November 27, 2009, in which Claims 1-42 were rejected. The Applicants submit this Appeal Brief to the Board of Patent Appeals and Interferences in compliance with the requirements of 37 C.F.R. § 41.37, as stated in *Rules of Practice Before the Board of Patent Appeals and Interferences (Final Rule)*, 69 Fed. Reg. 49959 (August 12, 2004). The Applicants contend that the rejections of Claims 1-42 in this proceeding are in error, were previously overcome and are overcome again by this appeal.

I.   REAL PARTIES IN INTEREST

As the assignee of the entire right, title, and interest in the above-captioned patent application, the real parties in interest in this appeal, is:

> Sony Corporation, a Japanese corporation
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> Sony Electronics Inc., a corporation of the State of Delaware
> 1 Sony Drive
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per the assignment document filed on September 8, 2003.

II.   RELATED APPEALS AND INTERFERENCES

The Applicants are not aware of any other appeals or interferences related to the present application.

III.   STATUS OF THE CLAIMS

Claims 1-42 are involved in the appeal. Claims 1-4, 6-11, 13-17, 19-23, 25-27, 29-34 and 36-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0194309 to Carter (hereinafter "Carter", a copy of which is attached as Exhibit A) in view of U.S. Patent Application Publication No. 2002/0046278 to Hays et al. (hereinafter "Hays", a copy of which is attached as Exhibit B).   Claims 5, 12, 18, 24, 28, 35, 41 and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carter in view of Hays and in further view of U.S. Patent No. 6,892,230 to Gu et al. (hereinafter "Gu", a copy of which is attached as Exhibit C).

IV. STATUS OF THE AMENDMENTS FILED AFTER FINAL REJECTION

The latest amendment to the claims is reflected in the listing of the claims included in the Response to the Office Action mailed on November 27, 2009, which was filed on January 11, 2010, and has been entered for the purposes of this appeal.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention disclosed in the present application number 10/658,439 is directed to an interface layer, also referred to as a synchronization-CDS bridge, automatically provides a first set of update information to a Content Directory Service (CDS) regarding any content received by a first media server during a data synchronization process. The interface layer also provides a second set of update information to a synchronization application regarding any content newly added to the first media server subsequent to a last data synchronization. The interface layer discovers the second set of update information provided to the synchronization application from the CDS. The second set of update information is used by the synchronization application to select the newly added content during a next data synchronization.

The elements of Claim 1, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to discover the new content data and provide update information to the content directory service (120) regarding the new content data received by the database (140) from the external device during the content data synchronization.

The elements of Claim 8, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130)

coupled to communicate with the synchronization application (110) and the content directory service (120) to discover the new content added to the database (140) and provide update information to the synchronization application (110) regarding the new content added to the database (140), wherein the new content data is synchronized with the external device during a next content data synchronization.

The elements of Claim 15, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to discover the new content data received by the database (140) and provide first update information to the content directory service (120) regarding the new content data received by the database (140) from the external device during the content data synchronization, and to provide second update information to the synchronization application (110) regarding the new content data added to the database (140), wherein the new content data is synchronized with the external device during a next content data synchronization.

The elements of Claim 21, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The network of devices comprises a network device, a first media server (100) coupled to the network device, the first media server (100) including a database (140) to store content data, a synchronization application (110) to perform content data synchronization with the network device, a content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to discover the new content data received by the database (140) and provide first update information to the content directory service (120) regarding the new content data received by the database (140) from the network device during content data synchronization, and to provide second update information to the synchronization application (110) regarding the

new content data added to the database (140), wherein the new content data is synchronized with the network device during a next content data synchronization.

The elements of Claim 27, directed to one embodiment of the present invention, are described in the Specification at page 13, line 13 through page 15, line 2, and the accompanying Figures 5 and 6. The method comprises sending first update information to a content directory service (120) from an interface layer (130) regarding a first new content data received by a first media device from a second media device during content data synchronization performed by a synchronization application (110), thereby maintaining by the content directory service (120) directory information related to the first new content data received, and sending second update information to the synchronization application (110) from the interface layer (130) regarding a second new content added to the first media device, wherein the second new content data is synchronized with the second media device during a next content data synchronization.

The elements of Claim 32, directed to one embodiment of the present invention, are described in the Specification at page 13, line 13 through page 15, line 2, and the accompanying Figures 5 and 6. The method comprises performing data synchronization between a first media server (100) and a second media server (170), receiving content data related to the data synchronization on the first media server (100), obtaining update information related to the received content data from a synchronization application (110) on the first media server (100), providing the update information to a content directory service (120) of the first media server (100) and updating the content directory service (120) according to the update information, thereby maintaining by the content directory service (120) directory information related to the received content data.

The elements of Claim 38, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The apparatus comprises means for performing data synchronization between a first media server (100) and a second media server (170), means for receiving content data related to the data synchronization on the first media server (100), means for obtaining update information related to the received content data from a synchronization application (110) on the first media server (100), means for providing the update information to a content directory service (120) of the first media server (100) and means for updating the content directory service (120) according to the update information, wherein the content directory service (120) maintains directory information related to the received content data.

Means for performing data synchronization between a first media server (100) and a second media server (170) is shown in Figure 2. The synchronization application (110) can be any conventional synchronization application. The synchronization application (110) preferably provides data synchronization communications using one or more conventional synchronization protocols, including but not limited to SyncML, ICE, and Web DAV ... The synchronization application (110) enables a data synchronization process between the first media server (100) and either the web site (160), the remote media server (170), or the PDA (180). [Present Specification, page 11, lines 13-23]

Means for receiving content data related to the data synchronization on the first media server (100) is shown in Figure 2. During the data synchronization process, new content is received from the remote media server (170) by the first media server (100), and the new content is stored in the database (140) within the first media server (100). [Present Specification, page 11, lines 28-30]

Means for obtaining update information related to the received content data from a synchronization application (110) on the first media server (100) is shown in Figure 2. The synchronization-CDS bridge (130) searches the synchronization application (110) for any newly added content sent to the database (140). Information related to any new content discovered by the synchronization-CDS bridge (130) is sent by the synchronization-CDS bridge (130) to the CDS (120) as update information. [Present Specification, page 11, line 31 through page 12, line 2]

Means for providing the update information to a content directory service (120) of the first media server (100) is shown in Figure 2. The synchronization-CDS bridge (130) searches the synchronization application (110) for any newly added content sent to the database (140). Information related to any new content discovered by the synchronization-CDS bridge (130) is sent by the synchronization-CDS bridge (130) to the CDS (120) as update information. [Present Specification, page 11, line 31 through page 12, line 2]

Means for updating the content directory service (120) according to the update information is shown in Figure 2. The CDS (120) is updated according to the update information received from the synchronization-CDS bridge (130), so that the CDS (120) accurately reflects all content in the database (140), including the newly added content, subsequent to the data synchronization. [Present Specification, page 11, lines 2-4]

The elements of Claim 39, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying

Figure 2. The media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to automatically provide update information to the content directory service (120) regarding the new content data received by the database (140) from the external device during the content data synchronization without user intervention.

The elements of Claim 40, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to automatically provide first update information to the content directory service (120) regarding the new content data received by the database (140) from the external device during the content data synchronization without user intervention, and to automatically provide second update information to the synchronization application (110) regarding the new content data added to the database (140) without user intervention, wherein the new content data is synchronized with the external device during a next content data synchronization.

The elements of Claim 41, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The Universal Plug and Play media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a Universal Plug and Play content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to discover the new content data and provide update information to the content directory service (120) regarding the new content data received by the database

(140) from the external device during the content data synchronization, wherein the interface layer (130) provides the update information to the synchronization application (110) regarding the new content data added to the database (140), the new content data to be synchronized with the external device during a next content data synchronization.

The elements of Claim 42, directed to one embodiment of the present invention, are described in the Specification at page 10, line 8 through page 12, line 6, and the accompanying Figure 2. The Universal Plug and Play enabled media server (100) comprises a database (140) to store content data, a synchronization application (110) to perform content data synchronization with an external device, a Universal Plug and Play content directory service (120) to browse the content data stored in the database (140) and to provide information regarding the content data stored in the database (140) and to maintain directory information related to new content received, and an interface layer (130) coupled to communicate with the synchronization application (110) and the content directory service (120) to discover the new content added to the database (140) and provide update information to the synchronization application (110) regarding the new content added to the database (140), wherein the new content data is synchronized with the external device during a next content data synchronization, further wherein the interface layer (130) provides the update information to the content directory service (120) regarding the new content data received by the database (140) from the external device during content data synchronization.

VI.   GROUNDS OF REJECTION AND OTHER MATTERS TO BE REVIEWED ON APPEAL

The following issues are presented in this Appeal Brief for review by the Board of Patent Appeals and Interferences:

1.   Whether Claims 1-4, 6-11, 13-17, 19-23, 25-27, 29-34 and 36-40 are properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Carter in view of Hays.

2.   Whether Claims 5, 12, 18, 24, 28, 35, 41 and 42 are properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Carter in view of Hays and further in view of Gu.

VII.   ARGUMENT

Grounds for Rejection

Within the Office Action, 1-4, 6-11, 13-17, 19-23, 25-27, 29-34 and 36-40 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Carter in view of Hays.

Outline of Arguments

In the discussion that follows, the Applicants discuss the teachings of Carter, the teachings of Hays and the teachings of the combination of Carter and Hays. As will be discussed in detail below, the combination of Carter and Hays does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, the combination of Carter and Hays does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, the combination of Carter and Hays does not teach 3) an interface layer that is *a part of the media server*. Additionally, 4) the combination of Carter and Hays is improper.

       1.   Carter does not teach 1) a content directory service to maintain *directory information related* to new content received. Carter also does not teach 2) an *interface layer* coupled to communicate with the synchronization application and the content directory service to provide update information to the content directory service regarding new content data received by the database from the external device during the content data synchronization. Similarly, Carter cannot teach 3) an interface layer that is *a part of the media server.* Further, Carter does not teach 4) a *content directory service* to browse the content data stored in the database and to provide information regarding the content data stored in the database. Additionally, Carter does not teach 5) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user intervention.

Carter teaches a system and method for synchronizing a multiplicity of devices in a multimedia environment which includes a multimedia device, a multimedia database, a portable multimedia player, a personal computer and a master digital multimedia device. [Carter, Figure 1] The multimedia database is an online collection of audio and video works. [Carter, ¶ 28] The recorded multimedia works are able to be *categorized* by format. [Carter, ¶ 28] The multimedia environment also includes a control unit which provides a means to select and play a multimedia work via keys and commands for operations such as start, stop, skip, repeat, shuffle and save, and a display to display information about a selected work. [Carter, ¶ 30] A user is able to *select* desired multimedia works to be synchronized and downloaded for storage on a digital multimedia device from the music multimedia database. [Carter, ¶ 31] As is recognized within the Office Action of November 27, 2009, Carter does not teach 1) a content directory service to maintain *directory information related* to new content received. [Office Action, page 3 (emphasis added)] Also as recognized within the Office Action of November 27, 2009, Carter does not teach 2) an *interface layer* coupled to communicate with the synchronization application and the content directory service to provide update information to the content directory service regarding new content data received by the database from the external device during the content data synchronization. [Office action, page 3, (emphasis added)] Indeed, because Carter does not teach an interface layer, Carter inherently cannot teach 3) an interface layer that is *a part of the media server*. Furthermore, Carter does not teach 4) a *content directory service* to browse the content data stored in the database and to provide information regarding the content data stored in the database. Indeed, as recognized above, Carter does not teach a content directory service of any kind. Additionally, Carter does not teach 5) to automatically provide <u>update information</u> to the content directory service regarding the new content data received by the database from the external device during the content data synchronization <u>without user intervention</u>. Accordingly, Carter does not teach the presently claimed invention.

Carter does not teach to automatically provide <u>update information</u> to the content directory service regarding the new content data received by the database from the external device during the content data synchronization <u>without user intervention</u>. Within the Office Action of November 27, 2009, it is asserted that automatic synchronization is taught in Carter by ¶ 31, which states "digital multimedia device 104 allows the <u>user</u>, via the control unit 314 means, to request and download entirely new recorded data into the digital multimedia device 104 or program the digital multimedia device 104 to synchronize and update the user's audio/video files automatically from a multimedia database." [Office Action, page 10 (emphasis added)]

However, the claimed limitations of the presently claimed invention include the phrase "without user intervention." As described above, Carter clearly teaches that "the user" requests and downloads or programs the digital multimedia device, and thus Carter clearly requires user intervention. Also within the Office Action of November 27, 2009, it is asserted that "Carter teaches automatic synchronization without user intervention **during the synchronization period**" and "[thus] the program inherently does not require user intervention." [Office Action, page 13 (emphasis added)] However, the claimed limitation does not recite "without user intervention during the synchronization period," it just recites "without user intervention." The addition of "during the synchronization period" is not recited in the claims and thus cannot be used to allow the prior art to teach the claimed limitations. Instead, the prior art must teach that the automatic update occurs wholly without user intervention, without any limitations placed on when the user interference occurs. Thus, Carter does not teach to automatically provide <u>update information</u> to the content directory service regarding the new content data received by the database from the external device during the content data synchronization <u>without user intervention</u>.

Furthermore, even if Carter does teach automatically downloading/synchronizing new content without user intervention, that is not the same as automatically providing *update information* regarding *new content data* to a Content Directory Service (CDS). The updating described in the claim limitations is a reporting of new content downloaded to the database to the CDS, not the downloading itself. Indeed, because the claimed updating is about update info regarding the new content downloaded, it cannot occur during or before the actual downloading. Instead, it is inherent that when new content is added to the database via the synchronization, update info related to this new content is reported/updated to the CDS without user intervention. In other words, the claimed limitation is not describing the synchronization of the data itself with the media server, but instead the updating or synchronization of the CDS with the update info "regarding the new content data." Consequently, because as recognized in the Office Action of November 27, 2009 Carter does not teach a CDS at all, it inherently cannot teach the claimed automatic updating of the CDS when new content is synchronized onto the database. A reference cannot teach the updating of an element it does not possess. Furthermore, even for the purpose of combination with other references, Carter does not even teach the concept of automatically providing update information regarding new content to a CDS without user intervention. As a result, even if another reference taught a CDS, Carter could not be relied upon for teaching

updating a CDS with update info regarding a synchronization. Accordingly, for at least these reasons, Carter does not teach to automatically provide <u>update information</u> to the content directory service regarding the new content data received by the database from the external device during the content data synchronization <u>without user intervention</u>.

      2.   <u>Hays does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, Hays does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, Hays does not teach 3) an interface layer that is *a part of the media server.*</u>

Hays teaches a distribution system including a server and collection kiosks for distributing content for a medical information collection system. Hays also teaches:

> The kiosk clients, which are implemented at the collection kiosks, include a web browser (not shown), web pages 811, a server interface 812, and a client database 813. The web pages define the user interface for the collection kiosks. The description of these web pages (e.g., HTML documents) along with additional content (e.g., .gif files) may be stored in a certain directory of the file system. A user of the collection kiosk uses the browser to browse the various web pages. The server interface is responsible for accessing the central medical information system to retrieve updated content and registered user updates. In one embodiment, the server interface acts as an FTP client to retrieve updated content and user updates from the central medical information system. The server interface may periodically (e.g., daily) established an FTP connection to retrieve the updated content and user information. The server interface stores the updated content in the web page directory to overwrite or augment existing web page content or updates a registered user table to reflect the updated user information. The client database thus contains the identification of each of the users of the central medical information system along with the medical information collected at that collection kiosk. [Hays, ¶ 26]

Hays is only cited for the purpose of teaching "a content directory service to maintain directory information related to new content received and to browse the content data stored in the database" and "a server interface." Thus, Hays does not teach to automatically provide <u>update</u>

information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user intervention.

Within the Office Action of November 27, 2009, Hays paragraph 26 is cited as teaching a content directory service to browse the content data stored in the database and a server interface for accessing the central medical information system to retrieve updated content and storing the updated content in the web page directory. [Office Action, page 4] However, Hays does not teach an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Indeed, Hays does not teach synchronization at all, much less communication by an interface layer with a synchronization application. Specifically, Hays teaches "[i]n block 1202, the routine requests that all the update files in the directory for this collection kiosk at the FTP server be deleted so that the files are not retrieved again." [Hays, ¶ 31] However, a synchronization process involves data being stored on multiple devices. Thus, because the data of Hays is deleted from the server, it is not synchronized. Within the Office Action, it is further asserted that Hays teaches a synchronization application by "any software program to update or retrieve new information." [Office Action of November 27, 2009, page 12] However, again, Hays does not explicitly or inherently teach any such program. Indeed, Hays teaches nothing of synchronization and never uses the words "sync" or "synchronization." Therefore, because Hays does not teach a synchronization application, it inherently cannot teach an interface layer coupled to communicate with the non-existent synchronization application. Moreover, even if Carter were used to teach the synchronization application. Nowhere does Hays suggest or even hint that its asserted "interface layer" would be beneficially coupled to communicate with a synchronization application. Thus, in either case, Hays does not teach an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and *provide update information* to the content directory service *regarding* the new content data received by the database from the external device during the content data synchronization.

Further, Hays does not teach an interface layer that is *a part of the media server.* Instead, the alleged "interface" of Hays is separate from the media server. Specifically, within the Office Action of November 27, 2009, it is asserted that Hays teaches the interface layer by "interpreted as server interface [812]." [Office Action, page 12] However, the server interface 812 is located

on the kiosk clients which are remote from the central repository/central server of Hays [Hays, ¶ 22] Thus, Hays does not teach an interface layer that is a part of the media server. Moreover, even if Hays is only used to teach the use of an interface layer, no portion of Hays suggests or even hints that the alleged interface layer should or could be located on the media server. Instead, Hays teaches away from such a use as each kiosk of Hays has its own server interface 812. Accordingly, Hays does not teach an interface layer that is a part of the media server.

3. The combination of Carter and Hays does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, the combination of Carter and Hays does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, the combination of Carter and Hays does not teach 3) an interface layer that is *a part of the media server*. Additionally, 4) the combination of Carter and Hays is improper.

As described above, neither Carter nor Hays teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. As a result, neither Carter, Hays nor their combination teaches the presently claimed invention.

Moreover, the combination of Carter and Hays is improper. There is no motivation to warrant the combination of Carter and Hays. There is no hint, teaching or suggestion in either of Carter or Hays to warrant their combination.

This is a classic case of impermissibly using hindsight to make a rejection based on obviousness. The Court of Appeals for the Federal Circuit has stated that "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In Re Fritch, 972 F.2d, 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). As recognized within the Office Action, Carter does not teach a content directory service to maintain *directory information related* to new content received. As also recognized within the Office Action of November 27, 2009, Carter does not teach an *interface layer* coupled to communicate with the synchronization application and the content directory service to provide update information to the content directory service regarding new content data received by the database from the external device during the content data synchronization. Within the Office Action, it is stated that

> [i]t would have been obvious for one of ordinary skill in the art at the time of the invention was made to combine Hays with Carter in order to efficiently synchronize multiple devices [to] each other via a central database so that all the devices have the same content and content management. [Office Action, page 4]

It is only with the benefit of the present claims, as a "template" that there is any motivation to combine the global login system of Hays with the multimedia synchronization method of Carter. No such motivation can be found in the teachings of either of the references. To conclude that the combination of Carter and Hays is obvious, based on the teachings of these references, is to use hindsight based on the teachings of the present invention and to read much more into Carter and Hays than their actual teachings. This is simply not permissible based on the directive from the Court of Appeals for the Federal Circuit.

It is well settled that to establish a *prima facie* case of obviousness, three basic criteria must be met:

1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;

2) there must be a reasonable expectation of success; and

3) the prior art reference, or references, must teach or suggest all the claim limitations. MPEP § 2143.

The burden of establishing a *prima facie* case of obviousness based on the teachings of Carter and Hays has not been met within the Office Action.

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Furthermore, to rely on a reference under 35 U.S.C. §103, it must be analogous prior art according to MPEP 2141.01(a). Here, Hays is nonanalogous art as it is directed to a global login system whereas the presently claimed invention is directed to a content directory and synchronization bridge. Global login systems and synchronization bridges are not the same art, nor do they address the same problems. Indeed, as described above, nowhere in Hays is even the word "sync" or "synchronization" used. Accordingly, Hays is not able to be combined with Carter to form a proper §103 rejection.

In contrast to Carter, Hays and their combination, the presently claimed invention is directed to a content directory and synchronization bridge. A first media server is coupled to one or more devices. The first media server includes a database to store content. The first media server also includes a Content Directory Service (CDS), a synchronization application, and a synchronization-CDS bridge. The synchronization-CDS bridge acts as an interface layer between the synchronization application and the CDS. The synchronization application provides data synchronization communications using one or more conventional synchronization protocols.

As is well known in the art, CDS is a service that is compliant with UPnP architecture. A UPnP network device uses the UPnP CDS to compile detailed information about each content item on the UPnP network device. Each content item that is referenced by the CDS includes various information about the content item including the transfer protocol(s) and file format(s) that the UPnP network device storing the content item can use to transfer the content item to another UPnP network device. [Present Specification, page 4, line 30 through page 5, line 2]

The synchronization application of the claimed invention enables a data synchronization process between the first media server and a web site, a remote media server, a PDA or another device. During the data synchronization process, new content is received from the remote media server by the first media server, and the new content is stored in the database within the first media server. As the new content is received by the database, the synchronization application keeps a record of the new content received. The synchronization-CDS bridge searches the synchronization application for any newly added content sent to the database. *Information related* to any new content discovered by the synchronization-CDS bridge is *sent* by the synchronization-CDS bridge to the CDS as *update information*. The CDS is updated according to the update information received from the synchronization-CDS bridge, so that the CDS accurately reflects all content in the database, including the newly added content, subsequent to the data synchronization. [Present Specification, page 11, line 6 through page 12, line 4] Once updated, the CDS includes *directory information* related to the *new content* received. [Present

Specification, page 14, lines 5-6] Data synchronization between the first media server and the web site, and between the first media server and the PDA or other device is performed in a similar manner as described above. [Present Specification, page 12, lines 5-6] As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server.*

      4.   <u>The claims distinguish over Carter, Hays and their combination.</u>

The claims are grouped separately below to indicate that they do not stand or fall together.

      a.   <u>Claims 1-4, 6 and 7</u>

The independent Claim 1 is directed to a media server. The media server of Claim 1 comprises a database to store content data, a synchronization application to perform content data synchronization with an external device, a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data

and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 1 is allowable over the teachings of Carter, Hays and their combination.

Claims 2-4, 6 and 7 are dependent on the independent Claim 1. As discussed above, the independent Claim 1 is allowable over Carter, Hays and their combination. Accordingly, Claims 2-4, 6 and 7 are all also allowable as being dependent upon an allowable base claim.

      b.   <u>Claims 8-11, 13 and 14</u>

The independent Claim 8 is directed to a media server. The media server of Claim 8 comprises a database to store content data, a synchronization application to perform content data synchronization with an external device, a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content added to the database and provide update information to the synchronization application regarding the new content added to the database, wherein the new content data is synchronized with the external device during a next content data synchronization. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 8 is allowable over the teachings of Carter, Hays and their combination.

Claims 9-11, 13 and 14 are dependent on the independent Claim 8. As discussed above, the independent Claim 8 is allowable over Carter, Hays and their combination. Accordingly, Claims 9-11, 13 and 14 are all also allowable as being dependent upon an allowable base claim.

c.   Claims 15-17, 19 and 20

The independent Claim 15 is directed to a media server. The media server of Claim 15 comprises a database to store content data, a synchronization application to perform content data synchronization with an external device, a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data received by the database and provide first update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization, and to provide second update information to the synchronization application regarding the new content data added to the database, wherein the new content data is synchronized with the external device during a next content data synchronization. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 15 is allowable over the teachings of Carter, Hays and their combination.

Claims 16, 17, 19 and 20 are dependent on the independent Claim 15. As discussed above, the independent Claim 15 is allowable over Carter, Hays and their combination. Accordingly, Claims 16, 17, 19 and 20 are all also allowable as being dependent upon an allowable base claim.

d.   Claims 21-23, 25 and 26

The independent Claim 21 is directed to a network of devices. The network of devices of Claim 21 comprises a network device, a first media server coupled to the network device, the first media server including a database to store content data, a synchronization application to

perform content data synchronization with the network device, a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data received by the database and provide first update information to the content directory service regarding the new content data received by the database from the network device during content data synchronization, and to provide second update information to the synchronization application regarding the new content data added to the database, wherein the new content data is synchronized with the network device during a next content data synchronization. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 21 is allowable over the teachings of Carter, Hays and their combination.

Claims 22, 23, 25 and 26 are dependent on the independent Claim 21. As discussed above, the independent Claim 21 is allowable over Carter, Hays and their combination. Accordingly, Claims 22, 23, 25 and 26 are all also allowable as being dependent upon an allowable base claim.

e.   Claims 27 and 29-31

The independent Claim 27 is directed to a method of synchronizing data between two network devices. The method of Claim 27 comprises sending first update information to a content directory service from an interface layer regarding a first new content data received by a first media device from a second media device during content data synchronization performed by a synchronization application, thereby maintaining by the content directory service directory information related to the first new content data received, and sending second update information to the synchronization application from the interface layer regarding a second new content added

to the first media device, wherein the second new content data is synchronized with the second media device during a next content data synchronization. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 27 is allowable over the teachings of Carter, Hays and their combination.

Claims 29-31 are dependent on the independent Claim 27. As discussed above, the independent Claim 27 is allowable over Carter, Hays and their combination. Accordingly, Claims 29-31 are all also allowable as being dependent upon an allowable base claim.

f.   Claims 32-34, 36 and 37

The independent Claim 32 is directed to a method of synchronizing data between two network devices. The method of Claim 32 comprises performing data synchronization between a first media server and a second media server, receiving content data related to the data synchronization on the first media server, obtaining update information related to the received content data from a synchronization application on the first media server, providing the update information to a content directory service of the first media server and updating the content directory service according to the update information, thereby maintaining by the content directory service directory information related to the received content data. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these

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reasons, the independent Claim 32 is allowable over the teachings of Carter, Hays and their combination.

Claims 33, 34, 36 and 37 are dependent on the independent Claim 32. As discussed above, the independent Claim 32 is allowable over Carter, Hays and their combination. Accordingly, Claims 33, 34, 36 and 37 are all also allowable as being dependent upon an allowable base claim.

        g.   Claim 38

The independent Claim 38 is directed to an apparatus for synchronizing data between two network devices. The apparatus of Claim 38 comprises means for performing data synchronization between a first media server and a second media server, means for receiving content data related to the data synchronization on the first media server, means for obtaining update information related to the received content data from *a synchronization application on the first media server*, means for providing the update information to a content directory service of the first media server and means for updating the content directory service according to the update information, wherein the content directory service maintains directory information related to the received content data. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 38 is allowable over the teachings of Carter, Hays and their combination.

        h.   Claim 39

The independent Claim 39 is directed to a media server. The media server of Claim 39 comprises a database to store content data, a synchronization application to perform content data synchronization with an external device, a content directory service to browse the content data

stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user intervention. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 39 is allowable over the teachings of Carter, Hays and their combination.

      i.   <u>Claim 40</u>

The independent Claim 40 is directed to a media server. The media server of Claim 40 comprises a database to store content data, a synchronization application to perform content data synchronization with an external device, a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to automatically provide first update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user intervention, and to automatically provide second update information to the synchronization application regarding the new content data added to the database without user intervention, wherein the new content data is synchronized with the external device during a next content data synchronization. As described above, the combination of Carter and Hays is improper. As further described above, neither Carter, Hays nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the

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content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 40 is allowable over the teachings of Carter, Hays and their combination.

Grounds for Rejection

Within the Office Action, Claims 5, 12, 18, 24, 28, 35, 41 and 42 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Carter in view of Hays and further in view of Gu.

Outline of Arguments

In the discussion that follows, the Applicants discuss the teachings of Carter and Hays, the teachings of Gu and the teachings of the combination of Carter, Hays and Gu. As will be discussed in detail below, the combination of Carter, Hays and Gu does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, the combination of Carter, Hays and Gu does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, the combination of Carter, Hays and Gu does not teach 3) an interface layer that is *a part of the media server*. Additionally, 4) the combination of Carter, Hays and Gu is improper.

5.   The combination of Carter and Hays does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content synchronization without user. Further, the combination of Carter and Hays does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, the combination of Carter and Hays does not teach 3) an interface layer that is *a part of the media server*. Additionally, 4) the combination of Carter and Hays is improper.

As described above, neither Carter nor Hays teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. As a result, neither Carter, Hays nor their combination teaches the presently claimed invention. As also described above, the combination of Carter and Hays is improper.

6.   Gu does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, Gu does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, Gu does not teach 3) an interface layer that is *a part of the media server*.

Gu teaches a device control model that provides an integrated set of addressing, naming, discovery and description processes that enables automatic, dynamic and ad-hoc self-setup by devices to interoperate with other devices on a network. [Gu, Abstract] Gu is only cited for the purpose of teaching Universal Plug and Play. [Gu, col. 5, lines 20-40] However, Gu does not teach to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, Gu does not teach an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, Gu does not teach an interface layer that is *a part of the media server*. Accordingly, Gu does not teach the presently claimed invention.

7.   The combination of Carter, Hays and Gu does not teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user. Further, the combination of Carter, Hays and Gu does not teach 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization. Moreover, the combination of Carter, Hays and Gu does not teach 3) an interface layer that is *a part of the media server*. Additionally, 4) the combination of Carter, Hays and Gu is improper.

As described above, neither Carter, Hays nor Gu teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media*

server. Accordingly, neither Carter, Hays, Gu nor their combination teach the presently claimed invention.

Furthermore, there is not motivation to combine Gu with Carter and Hays. Within the Office Action of November 27, 2009, it is asserted that the motivation is to avoid user installation experience, persistent relationship configurations and software driver download whenever connecting multiple devices. [Office Action, page 11] However, Hays does not experience any of those problems because it only uses standard kiosks designed to connect with the central server over the internet using internet protocol. Further, Carter also lacks those problems as it already has a system in place for connecting multiple media devices. Accordingly, there is no motivation to combine the UPnP of Gu with the systems of Carter and Hays. Further, as described above, Hays in non-analogous art and therefore cannot be properly combined with Gu. Accordingly, the combination of Carter, Hays and Gu is improper.

8.   The claims distinguish over Carter, Hays, Gu and their combination.

The claims are grouped separately below to indicate that they do not stand or fall together.

a.   Claims 5, 12, 18, 24, 28 and 35

Claim 5 is dependent on the independent Claim 1. Claim 12 is dependent on the independent Claim 8. Claim 18 is dependent on the independent Claim 15. Claim 24 is dependent on the independent Claim 21. Claim 28 is dependent on the independent Claim 27. Claim 35 is dependent on the independent Claim 32. As discussed above, the independent Claims 1, 8, 15, 21, 27 and 32 are all allowable over the teachings of Carter, Hays and their combination. Accordingly, Claims 5, 12, 18, 24, 28 and 35 are all also allowable as being dependent on an allowable base claim.

b.   Claim 41

The independent Claim 41 is directed to a Universal Plug and Play enabled media server. The Universal Plug and Play media server of Claim 41 comprises a database to store content

data, a synchronization application to perform content data synchronization with an external device, a Universal Plug and Play content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization, wherein the interface layer provides the update information to the synchronization application regarding the new content data added to the database, the new content data to be synchronized with the external device during a next content data synchronization. As described above, the combination of Carter, Hays and Gu is improper. As further described above, neither Carter, Hays, Gu nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 41 is allowable over the teachings of Carter, Hays, Gu and their combination.

        c.   Claim 42

     The independent Claim 42 is directed to a Universal Plug and Play enabled media server. The Universal Plug and Play enabled media server of Claim 42 comprises a database to store content data, a synchronization application to perform content data synchronization with an external device, a Universal Plug and Play content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received, and an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content added to the database and provide update information to the synchronization application regarding the new content added to the database, wherein the new content data is synchronized with the external device during a next content data synchronization,

further wherein the interface layer provides the update information to the content directory service regarding the new content data received by the database from the external device during content data synchronization. As described above, the combination of Carter, Hays and Gu is improper. As further described above, neither Carter, Hays, Gu nor their combination teach 1) to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user, 2) an interface layer coupled to communicate with the *synchronization application* and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization or 3) an interface layer that is *a part of the media server*. For at least these reasons, the independent Claim 42 is allowable over the teachings of Carter, Hays, Gu and their combination.

9.   CONCLUSION

For the above reasons, it is respectfully submitted that the Claims 1-42 are allowable over the cited prior art references. Therefore, a favorable indication is respectfully requested.

Respectfully submitted,
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VIII.   CLAIMS APPENDIX

This appendix includes a list of the claims under appeal.

1.   A media server comprising:
   a.   a database to store content data;
   b.   a synchronization application to perform content data synchronization with an external device;
   c.   a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and
   d.   an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization.

2.   The media server of claim 1 wherein the interface layer provides the update information to the synchronization application regarding the new content data added to the database, the new content data to be synchronized with the external device during a next content data synchronization.

3.   The media server of claim 1 wherein the external device is a second media server.

4.   The media server of claim 1 wherein the external device includes an internet service.

5.   The media server of claim 1 wherein the media server is a Universal Plug and Play enabled device and the content directory service is a Universal Plug and Play content directory service.

6.   The media server of claim 1 wherein the content data includes media files.

7.   The media server of claim 1 wherein the content data includes audio, video, graphic, and text data.

8.   A media server comprising:
        a.   a database to store content data;
        b.   a synchronization application to perform content data synchronization with an external device;
        c.   a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and
        d.   an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content added to the database and provide update information to the synchronization application regarding the new content added to the database, wherein the new content data is synchronized with the external device during a next content data synchronization.

9.   The media server of claim 8 wherein the interface layer provides the update information to the content directory service regarding the new content data received by the database from the external device during content data synchronization.

10.   The media server of claim 8 wherein the external device is a second media server.

11.   The media server of claim 8 wherein the external device includes an internet service.

12.   The media server of claim 8 wherein the media server is a Universal Plug and Play enabled device and the content directory service is a Universal Plug and Play content directory service.

13.   The media server of claim 8 wherein the content data includes media files.

14.   The media server of claim 8 wherein the content data includes audio, video, graphic, and text data.

15. A media server comprising:

    a. a database to store content data;

    b. a synchronization application to perform content data synchronization with an external device;

    c. a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and

    d. an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data received by the database and provide first update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization, and to provide second update information to the synchronization application regarding the new content data added to the database, wherein the new content data is synchronized with the external device during a next content data synchronization.

16. The media server of claim 15 wherein the external device is a second media server.

17. The media server of claim 15 wherein the external device includes an internet service.

18. The media server of claim 15 wherein the media server is a Universal Plug and Play enabled device and the content directory service is a Universal Plug and Play content directory service.

19. The media server of claim 15 wherein the content data includes media files.

20. The media server of claim 15 wherein the content data includes audio, video, graphic, and text data.

21. A network of devices comprising:

    a.   a network device;

    b.   a first media server coupled to the network device, the first media server including:

        i.   a database to store content data;

        ii.   a synchronization application to perform content data synchronization with the network device;

        iii.   a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and

        iv.   an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data received by the database and provide first update information to the content directory service regarding the new content data received by the database from the network device during content data synchronization, and to provide second update information to the synchronization application regarding the new content data added to the database, wherein the new content data is synchronized with the network device during a next content data synchronization.

22. The network of devices of claim 21 wherein the network device is a second media server.

23. The network of devices of claim 21 wherein the network device includes an internet service.

24. The network of devices of claim 21 wherein the first media server is a Universal Plug and Play enabled device and the content directory service is a Universal Plug and Play content directory service.

25. The network of devices of claim 21 wherein the content data includes media files.

26.   The network of devices of claim 21 wherein the content data includes audio, video, graphic, and text data.

27.   A method of synchronizing data between two network devices, the method comprising:

    a.   sending first update information to a content directory service from an interface layer regarding a first new content data received by a first media device from a second media device during content data synchronization performed by a synchronization application, thereby maintaining by the content directory service directory information related to the first new content received; and

    b.   sending second update information to the synchronization application from the interface layer regarding a second new content added to the first media device, wherein the second new content data is synchronized with the second media device during a next content data synchronization.

28.   The method of claim 27 wherein the first media server is a Universal Plug and Play enabled device and the content directory service is a Universal Plug and Play content directory service.

29.   The method of claim 27 wherein the content data includes media files.

30.   The method of claim 27 wherein the content data includes audio, video, graphic, and text data.

31.   The method of claim 27 wherein sending the first update information to the content directory service and sending the second update information to the synchronization application are performed automatically.

32.   A method of synchronizing data between two network devices, the method comprising:

    a.   performing data synchronization between a first media server and a second media server;

    b.   receiving content data related to the data synchronization on the first media server;

c. obtaining update information related to the received content data from a synchronization application on the first media server;

d. providing the update information to a content directory service of the first media server; and

e. updating the content directory service according to the update information, thereby maintaining by the content directory service directory information related to the received content data.

33. The method of claim 32 further comprising obtaining additional update information from a database within the first media server, wherein the additional update information corresponds to new content data added to the database.

34. The method of claim 33 further comprising providing the additional update information to the synchronization application such that the new content data is synchronized with the second media device during a next data synchronization.

35. The method of claim 32 wherein the first media server is a Universal Plug and Play enabled device and the content directory service is a Universal Plug and Play content directory service.

36. The method of claim 32 wherein the content data includes media files.

37. The method of claim 32 wherein the content data includes audio, video, graphic, and text data.

38. An apparatus for synchronizing data between two network devices, the apparatus comprising:

a. means for performing data synchronization between a first media server and a second media server;

b. means for receiving content data related to the data synchronization on the first media server;

c. means for obtaining update information related to the received content data from a synchronization application on the first media server;

d.   means for providing the update information to a content directory service of the first media server; and

e.   means for updating the content directory service according to the update information, wherein the content directory service maintains directory information related to the received content data.

39.   A media server comprising:

a.   a database to store content data;

b.   a synchronization application to perform content data synchronization with an external device;

c.   a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and

d.   an interface layer coupled to communicate with the synchronization application and the content directory service to automatically provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user intervention.

40.   A media server comprising:

a.   a database to store content data;

b.   a synchronization application to perform content data synchronization with an external device;

c.   a content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and

d.   an interface layer coupled to communicate with the synchronization application and the content directory service to automatically provide first update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization without user intervention, and to automatically provide second update information to the

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synchronization application regarding the new content data added to the database without user intervention, wherein the new content data is synchronized with the external device during a next content data synchronization.

41. A Universal Plug and Play enabled media server comprising:
   a. a database to store content data;
   b. a synchronization application to perform content data synchronization with an external device;
   c. a Universal Plug and Play content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and
   d. an interface layer coupled to communicate with the synchronization application and the content directory service to discover the new content data and provide update information to the content directory service regarding the new content data received by the database from the external device during the content data synchronization, wherein the interface layer provides the update information to the synchronization application regarding the new content data added to the database, the new content data to be synchronized with the external device during a next content data synchronization.

42. A Universal Plug and Play enabled media server comprising:
   a. a database to store content data;
   b. a synchronization application to perform content data synchronization with an external device;
   c. a Universal Plug and Play content directory service to browse the content data stored in the database and to provide information regarding the content data stored in the database and to maintain directory information related to new content received; and

d. an interface layer coupled to communicate with the synchronization application
    and the content directory service to discover the new content added to the
    database and provide update information to the synchronization application
    regarding the new content added to the database, wherein the new content data is
    synchronized with the external device during a next content data synchronization,
    further wherein the interface layer provides the update information to the content
    directory service regarding the new content data received by the database from the
    external device during content data synchronization.

IX.   EVIDENCE APPENDIX

STATEMENT

Pursuant to 37 C.F.R. § 41.37(c)(1)(ix), the following is a statement setting forth where in the record the evidence of this appendix was entered by the examiner:

Evidence Description:	Where Entered:
U.S. Pat. App. Publication No. 2002/0194309	Office Action mailed March 1, 2007
U.S. Patent No. 6,892,230	Office Action mailed March 1, 2007
U.S. Pat. App. Publication No. 2002/0046278	Office Action mailed April 13, 2009
Office Action November 27, 2009	Examiner Office Action

X.   RELATED PROCEEDINGS APPENDIX

There are no related proceedings.